International Journal of Educational Science and Research (IJESR) ISSN(P): 2249-6947; ISSN(E): 2249-8052 Vol. 5, Issue 3, Jun 2015, 1-10

© TJPRC Pvt. Ltd.



STUDENTS' PERCEPTIONS TOWARDS THE USE OF SMART PHONE

APPLICATIONS FOR ENGLISH LEARNING

TZU-HUANG WENG & YI-JU CHEN

National Kaohsiung University of Applied Sciences, Taiwan

ABSTRACT

With the rapid development of mobile technology, "Mobile-assisted Language Learning" (MALL) has become an innovative approach of learning languages for the past few decades. Among the new mobile devices and applications, the emergence and popularity of diverse smart phone applications (Apps) especially bring forth the great potential for improving language learning/teaching efficiency. However, studies that explore this potential are not fully conducted. Therefore, this action research aims at better understanding students' perceptions towards the use of four smart phone applications chosen by the researcher for English learning according to the students' needs. Four junior high school students were chosen as the subjects. To better implement the research, daily reminders were sent to the subjects to maintain their usage frequency. In addition, their daily reports were collected. A questionnaire was administered and an oral interview was led to find out each subject's perceptions towards app learning. The required daily reports also served as a window to reveal their perceptions. The result shows students' positive perceptions towards the use of smart phone apps to learn English for many reasons. First, app-assisted language learning can happen anywhere, anytime with any smart mobile devices to achieve their learning desire. Second, the "real person pronunciation" and "adaptive testing" features provided can assist students in the absorption of new materials. Third, the function of "instant translation" and a large amount of "language drills" offer ample exercises. The most important benefit is that it could be supplementary to learners' study in a more interesting, dual-purpose and effortless way. Based on the research result, some suggestions are addressed for further studies to help improve mobile-assisted language learning.

KEYWORDS: MALL, Student Perception, Smart Phone Apps, English Learning

INTRODUCTION

The widespread use of mobile technology has attracted considerable attention for the past decade. In particular, mobile learning (M-learning) in education has evolved as a modern learning approach through the use of different kinds of devices. M-learning has become prevalent because of common 3G/4G service, widespread ownership of smart phones or tablets, and the development of bigger screen size and functional similarity to PCs. Many countries have started utilizing tablets or smart phones in different fields and related research is being increasingly done to investigate the factors that might influence the success of M-learning and the impact of M-learning on education (Ally, 2013). It has become a burgeoning trend which can't be ignored.

Among the different applications of M-learning, language learning through mobile devices has been continuously investigated. However, using mobile technology for language learning doesn't always assure effective or meaningful learning outcomes because users can search for information, play games, socialize, take photos, listen to music or watch videos on their mobile devices instead of learning a second/foreign language. Therefore, designing and choosing an

Tzu-Huang Weng & Yi-Ju Chen

application that guides users to apply an appropriate learning process with clear learning goals and maintain their daily habit of using mobile devices to learn will be considerably vital in mobile-assisted language learning (MALL). In order to achieve that, the perceptions of the students using language-learning apps should be investigated.

In this study, a small-scale action-research project is done to investigate how four junior high students learned English via handheld devices with four downloaded applications (apps). Students' perceptions towards the use of smart phone applications for English learning is the focus in this investigation and is surveyed by administering a questionnaire at the end of the project.

LITERATURE REVIEW

Mobile technology has brought different extents of impact on learning. There has been substantial research in the literature on the M-learning and MALL. The emergence of smart phone apps even has the potential capability to change the methods for language learning and is worthy of further investigation. Related studies and discussion about M-learning, MALL and app-assisted learning are respectively discussed below.

Mobile-Learning (M-Learning)

Mobile learning (M-learning) is generally defined as "learning through mobile technology". Mobile-technology-based learning can happen when learners are at a non-fixed place exploiting the learning opportunities offered by mobile technologies (Kim & Kwon, 2012; O'Malley et al, 2005). Other definitions focus on the use of wireless function which allows learners to access learning resources anywhere, any time with any mobile devices (Al-fahad, 2009; Al-Husain &Hammo, 2012; Ally, 2013; Kukulska-Hulme& Shield, 2007). In sum, mobile empowerment has been proven to feature 4As in mobility: anytime, anywhere, anyway and achievement. In other words, learners have mobility in time, location, technology, which is successful in helping students achieve their goals.

M-learning has been categorized into different fields. For instance, training in workplace (Ally &Samaka, 2013), information-accessing from digital library (Kroski, 2008), and audio-guide in museums (Sharples et al, 2007).

In addition, M-learning also plays an important role in education. For example, it has been used to improve computer engineering-technical computing vocabulary (Fotouhi-Ghazvini el. al, 2011) and learners became more competent and confident in the mobile game environment. Moreover, Mims (2011) reported that by 2015, all of South-Korea's elementary-level educational materials will be digitized and delivered on different kinds of technology and mobile devices. It seems that good M-learning projects/courses will continue to push the evolution of education and provide different methods for learning.

Mobile-Assisted Language Learning (MALL)

Due to the ubiquitous applications of mobile technology in the education field, their impact on language learning has been examined in depth. MALL was first coined by Chinnery in 2006. It stands for mobile-assisted language learning and means that learners use mobile technologies to support language learning (Chinnery, 2006). MALL has been utilized for different language skills, such as writing(Alzu'bi& Sabha, 2013), listening(Huang & Sun, 2010), reading(Chen & Hsu, 2008), grammar(Baleghizadeh&Oladrostam, 2010), pronunciation (Saran *et al.*, 2009; Jolliet, 2007) and vocabulary(Abbasi&Hashemi, 2013; Alzu'bi& Sabha, 2013; Başoğlu& Akdemir,2010; Song & Fox, 2008; Stockwell, 2010;).

Impact Factor (JCC): 4.3912 NAAS Rating: 2.72

Baleghizadeh and Oladrostam (2010) aimed at utilizing mobile phones to improve 40 female Iranian preintermediate students' grammatical accuracy in speaking. The result indicated that the mean score of the experimental group was significantly higher and proved the effectiveness of mobile devices for improving grammar accuracy.

In 2007, Jolliet proposed a situation immersion through role-play. Mini-scenarios allowed learners to engage with other participants and interact with a vocal computer through SMS. Mobile phones were seen as effective mediums for pronunciation in this project.

Among the aforementioned language skills, vocabulary has been one of the most commonly taught through technology. Chen and Hsu (2008) implemented a personalized intelligent mobile learning system on PDAsto recommend English news articles. The results indicated that the mobile-based system successfully provided an effective learning method for enhancing reading ability and vocabulary learning for some learners.

Alzu'bi and Sabha (2013) carried out a project examining the potential of mobile-based email exchange for vocabulary acquisition and writing skills. Significant improvement was shown in the vocabulary and writing ability of the experimental group.

In short, in addition to the features-4As of mobile-learning by which learning can happen anywhere, anytime with any devices to achieve goals, the flexibility, novelty, and exclusive language specific features such as real person pronunciation, instant translation and feedback are also very important in MALL.

Although it is undeniable that the emergence and design of mobile applications (apps) has become an irresistible trend in language learning, most of the MALL studies have been focused on the effect of utilizing built-in mobile application, such as email or recording function. Few studies are aimed at investigating the effect of applications on Google Play or Apple iTunes. Thus, the current and potential effect of smart phone apps still need to be examined, and more research needs to be done on the extent that these devices can help learners to achieve better learning results.

Smart Phone Applications (Apps) for English Learning

A smart phone application is one of the novel ways that may support extended learning. Apps have become a striking feature of social life since the advent of Apple's iTunes App store in 2008 (Lin & Lee, 2013). Moreover, "App" was voted as a word of 2010 from the list in 2010 words of the Year by the American dialect society (American Dialect Society, 2011). Black (2010) defined mobile applications as those specifically designed and developed by third-party companies for use on mobile devices. It has rapidly become popular because it is increasingly prevalent across mobile phone users. Besides, a May 2012 comScore study reported that subscribers used apps more than webpage browsing, which were 51.1% and 49.8% respectively. Thus, apps may have the potential to impact educational programs and deserve more attention and deeper research especially on language learning since foreign languages have been the most popular curriculum area supported by apps (Shuler, 2009).

The reasons of why smartphone apps gain such wide popularity in the English Learning field can be summarized by 4As, R.A.I.L. and S.I.D.E.

4As: Anywhere, Anytime, Anyway, and Achievement

Smart phone apps allow learners to learn without restriction of place, and they can do self-learning using apps whenever they want. In addition, learning goals can be achieved by using downloaded apps on various mobile devices, such

as tablets or smart phones.

R. A. I. L.: $\underline{\mathbf{R}}$ eal-Person Pronunciation, $\underline{\mathbf{A}}$ daptive-Testing, $\underline{\mathbf{I}}$ nstant Translation, and $\underline{\mathbf{L}}$ anguage-Drills

There are language specific functions that are provided by apps, whichhave attracted many language educators. For example, apps such as *Pronunciation Power* provide real person pronunciation which help learners with authentic pronunciation; Apps such as *Mobile English Test* with graded tests assist students with different English proficiency; Apps such as *Didaenglish* provide instant translation to make learning smoother, decrease learners' frustration and increase vocabulary; An ample amount of language drills are offered by many apps such as *Listening Drill* to enhance learners' English proficiency.

S. I. D. E: Supplementary, Interesting, Dual-Purpose, and Effortless

Many language drills can supplement school work; The multimedia effects such as visual or audio presentations provided by apps make language learning more interesting and appealing; Many apps provide functions that address more than one language skill, for example, vocabulary acquisition and reading comprehension; Finally, using apps to learn is considered effortless because learning can happen with one-finger entry or by touching screens without carrying heavy textbooks. In other words, Apps, as another rail to English learning, may offer side benefits for learners on the way to their final learning destination.

RESEARCH METHODS

Due to the rapid emergence of the latest and most advanced smart phones, the utilization of apps has gained more and more attention in many ways because advanced hardware/applications enhancement doesn't guarantee the best use of apps on language learning. The interest in investigating their potential impacts contributing to language learning is unceasingly increasing and more examination on the effect of apps is still necessary. Hence, this study is designed to investigate learners' perception toward the use of smart phone apps for English learning.

In this study, 4 junior high school students participated voluntarily. The study lasted around 2 months, and included 3 phases. Questionnaires were used to obtain the participants' perceptions toward the use of apps in English learning. Additionally, students' feedbacks were also reflected through discussion or daily reports. The details about participants, instruments and procedures are addressed below.

Participants

The study was conducted in the cram school where the researcher works. The four volunteers were from the same class. Their English ability was evaluated through an oral and written test every four months. All of them passed the tests and proceeded to a new session. Based on the background surveys, their self-reported English proficiencies were intermediate, which was quite consistent with their performance on their final tests. They all used mobile devices quite often but had never used apps for learning before. Before starting this project, three of them agreed learning through smart phone apps was helpful and the other neither agreed nor disagreed.

Instruments

Instruments of this study are either designed or chosen by the researchers. The Android mobile devices and the apps are chosen by the researchers; Participant background survey, daily reminders, daily report requirements, and a

Impact Factor (JCC): 4.3912 NAAS Rating: 2.72

questionnaire are created by the researchers.

The subjects use their own mobile devices to download the apps. Three use their tablets and one use a smart phone. Only one of the tablets have the access to 3G unlimited Internet while the other three can only download apps in free WiFi environments.

As for the choice of operating system, Android is chosen because the participants all use Android devices and Android has been in the leading position in smart phone operating systems in the third quarter of 2013 (Gartner, November 2013).

Before the participants start using apps, a modified background survey (Chen, 2013) is used to know what kind of mobile devices they have, how often they use mobile devices, if they have any experiences of using mobiles or apps for English learning and how they rate their overall English proficiency.

A set of modified criteria (Wright, 2003; Peachey, 2013) is then adopted to select suitable apps to meet their needs. The criteria include two phases, primary filtering and advanced filtering.

A daily reminder is sent to each participant through *Facebook* message board or *LINE* instant messages before ten o'clock every night because maintaining use frequency is the key point to successful learning. A modified daily report (Chen, 2013) is required from each subject to record the use frequency and encountered problems. Any problems or suggestions are welcome to be written down.

The modified questionnaire (Chuo & Kung, 2002; Rahamat et.al, 2011) consists of 34 items and uses a 4-point Likert scale to investigate participants' perceptions towards using apps for learning and their ranking towards the chosen apps.

Procedures

The procedures included three steps. Step A was the preparation phase when needs analysis, apps selection and evaluation were completed. Step B was the experiment phase when apps-use were oriented, daily-reminders forwarded, daily reports collected and final feedback completed. The last step was the survey phase when the post-experiment questionnaire for measuring their perceptions was administered.

On Step A, To meet the learning needs of the subjects, a background survey was distributed for the sake of choosing the right apps. In addition, only those apps that meet certain criteria were chosen. These apps must be categorized under "education", score above four stars by the reviewers, had been installed over 10,000 times and received considerable positive comments. Finally, four apps that focus on writing, listening, vocabulary and grammar were chosen: *Pandorabots English Tutor, English listening, Learn English 6000 words* and *English Grammar Course*.

On Step B, Orientation for each chosen app was conducted by the researchers to briefly introduce how to use a particular app. A daily reminder was sent five days a week before 10 pm, and daily reports were supposed to be filled out so that adjustments could be considered after discussion.

On Step C, A questionnaire was administered at the end of the project to find out their perceptions towards using apps for English learning.

RESULTS AND DISCUSSIONS

The demographic data showed that one of them used a smart phone to learn and the other three used tablets to learn. Two of them used mobile devices 1 to 3 times a day and two used them 4 to 7 times a day. Three of them spent 1 to 2 hours using apps every time and one of them spent less than 1 hour each time. They usually used apps at home.

From the feedback of the subjects, when the participants used *PandorabotEnglish tutor*, they would look up the new vocabulary whenever they encountered a word they did not know, which increased their vocabulary and learning autonomy. Additionally, it was surprising this app could recognize some informal abbreviations, for examples, "u=you." It meant that the conversation between apps and users would not break up easily and could stimulate more interaction.

Apart from the demographic data, by the questionnaire, the participants' perceptions towards using apps for English learning could be known in terms of six categories, readiness, learning aid, apps' satisfaction, reflection and expectation, the influence of mobile device and ranking.

The results showed that all of them agreed they were ready enough to use mobile devices for learning. In addition, teachers' help was still needed at times for most of them. A daily reminder was still thought to be necessary even though they had usually used the apps before receiving the reminder. Three of them agreed that filling a daily report was important. However, only two of them really filled out the reports for the first week. After the first week, none of them filled out any reports because they were too busy or they simply forgot.

Moreover, the questionnaire showed that most of the participants were quite satisfied with the chosen apps in terms of the material, user interface, layout, and description. They all agreed using apps was helpful for improving English performance and could supplement their English lessons.

After using apps, they all agreed that apps were useful, effective and interesting resources. All of them would like teachers to provide them with more apps because they wanted to learn on the go in the future. Three of them would like to look for more apps to learn as well, which suggested that learning through apps enhanced their motivation.

As for their mobile devices, three of them said that they would spend more time if they had internet-able devices and also if their mobile devices were more advanced. Furthermore, the screen size was a factor to influence how much time they spent on it.

The last part of the questionnaire was also very interesting. Their rankings for these four apps were considerately different except for two of them who both ranked *English listening* the fourth because they thought the reading speed was too slow.

From the result of the questionnaire, discussion and feedback, three problems were identified during the experiment. First, even with the daily reminders, participants did not make effort to fill in the daily reports, which needs to be taken into more consideration and adjusted in the future studies. Simplifying it in a short reply through Facebook or Line message or using a checklist only three times a week instead of every day might be optional methods to administer daily reminders. Next, the experiment should avoid being scheduled at a time when there are school tests or events. Tension that was brought upon may also affect their interest and passion of using apps to learn.

The last one was the length of the time. The participants might lose their interest gradually and use English learning apps less frequently if the project lasts too long, which probably influences their learning performance as well. In

Impact Factor (JCC): 4.3912 NAAS Rating: 2.72

order to ensure valid learning efficiency, it seems that managing a proper and entire time session when incorporating apps into teaching curricula is an important factor.

CONCLUSIONS

Since using mobile devices doesn't assure successful learning, this study has contributed to understanding how four learners perceive the use of smartphones apps to support their English learning. The results showed that tools can influence learning. Smartphones with high performance and bigger screens could make learning more smooth and efficient. Moreover, well-designed apps corresponding to learners' needs also have potential to provoke more interaction with learners and increase learners' autonomy. For instance, one participant felt surprised that one of apps could recognize some informal abbreviations, such "u"= "you", which could stimulate more interaction between learners and apps. All in all, the participants have positive perceptions towards the use of smartphone apps for English learning.

For further studies, more participants are needed to build a better sampling size. In addition, worksheets to evaluate learning outcomes could be created. That is to say, more rigorous demands on learners could enhance their learning performance. Last, since this project was only done outside the traditional school, in the future, integrating apps learning into conventional educational environments with appropriate help from instructors might bring unexpected learning results.

REFERENCES

- 1. Abbasi, M., & Hashemi, M. (2013). The impact/s of using mobile phone on English language vocabulary retention. *International Research Journal of Applied and Basic Sciences*, 4(3). 541-547.
- 2. Al-Fahad, F. N. (2009). Student's attitudes and perceptions towards the effectiveness of mobile learning in King Saud University, Saudi Arabia. *Turkish Online Journal of Educational Technology*, 8(2).
- 3. Al-Husain, D., & Hammo, B. (2012) The role of mobile technology and social media in mobile learning: A literature review. *In Proceedings of the 2012 International Conference on E-Learning, E-Business, Enterprise Information Systems, & E-Government* (pp.204-211)
- 4. Ally, M. (2013). Mobile learning: from research to practice to impact education. *Learning and Teaching in Higher Education: Gulf Perspectives*, 10(2). http://lthe.zu.ac.ae
- 5. Ally, M., & Samaka, M. (2013). Improving communication skills in the workplace using mobile learning. *Presentation at the UNESCO Second Mobile Learning Week. February*.
- 6. Alzu'bi, M., Akram, M., Sabha, N., & Rushdi, M. (2013). Using mobile-based email for English foreign language learners. *Turkish Online Journal of Educational Technology*, *12*(1).
- 7. Baleghizadeh, S., & Oladrostam, E. (2010). The effect of mobile assisted language learning (MALL) on grammatical accuracy of EFL students. *MEXTESOL Journal*, *34*(2), 1-10.
- 8. Basoglu, E. B., & Akdemir, O. (2010). A comparison of undergraduate students' English vocabulary learning: Using mobile phones and flash cards. *Turkish Online Journal of Educational Technology-TOJET*, *9*(3), 1-7.
- 9. Black, K. (2010). What is an iPhone app? Retrieved on October 24, 2010, from http://www.wisegeek.com/what-is-an-iphone-app.htm

- 10. Chen, X. B. (2013). Tablets for informal language learning: Student usage and attitudes. *Language Learning & Technology*, 17(1), 20-36.
- 11. Chen, C. M., & Hsu, S. H. (2008) Personalized intelligent mobile learning system for supporting effective English learning. *Educational Technology & Society*, 11(3), 153-180.
- 12. Chinnery, G. M. (2006). Emerging technologies. Going to the mall: mobile assisted language learning. *Language learning & technology*, 10(1), 9-16.
- 13. ComScore (2012) "comScore Reports May 2012 U.S. Mobile Subscriber Market Share" available at http://www.comscore.com/Insights/Press Releases/2012/7/comScore Reports May 2012 U.S. Mobile Subscriber Market Share
- 14. Fotouhi-Ghazvini1&2, F., Earnshaw, R. A., Moeini, A., Robison, D., &Excell, P. S. (2011). Implementing mixed reality games for mobile language learning. *mobile*, 111-118.
- 15. Huang, C., & Sun, P. (2010). Using mobile technologies to support mobile multimedia English listening exercises in daily life. In *The International Conference on Computer and Network Technologies in Education (CNTE 2010)*.
- 16. Jolliet, Y. (2007, August). M-learning: A pedagogical and technological model for language learning on mobile phones. In *Proceedings of the workshop on blended learning* (pp. 327-339).
- 17. Kim, H. & Kwon, Y. (2012). Exploring smartphone applications for effective Mobile-Assisted Language Learning. *Multimedia-Assisted Language Learning*, 16(1), 31-57.
- 18. Kroski, E. (2008). On the move with the mobile web: libraries and mobile technologies. Library technology reports, 44(5), 1-48.
- 19. Kukulska-Hulme, A., & Shield, L. (2007). An overview of mobile assisted language learning: Can mobile devices support collaborative practice in speaking and listening. *EuroCALL* 2007.
- 20. Kung, S. C., & Chuo, T. W. (2002). Students' perceptions of English learning through ESL/EFL websites. *TESL-EJ*, 6(1), 1-14.
- 21. Lin, C. H., & Lee, C. T. (2013). Taiwan undergraduate students'e-learning with application for Mobile Devices. *International Journal of Computer Networks and Wireless Communications (IJCNWC).* 3(4), 326-331
- 22. Mims, C. (2011, 1 July). Samsung windfall: all of South Korea's textbooks to go digital by 2015. MIT Technology Review.Retrieved from http://www.technologyreview.com/blog/mimssbits/26960/
- 23. O'Malley, C., Vavoula, G., Glew, J. P., Taylor, J., Sharples, M., Lefrere, P. &Waycott, J. (2005). Guidelines for learning/teaching/tutoring in a mobile environment. Peachey, N. (2013, September 25). Evaluating authentic mobile apps for learning Retrieved from http://nikpeachey.blogspot.tw/2013/09/evaluating-authentic-mobile-apps-for.html
- 24. Rahamat, R., Shah, P., Din, R., & Aziz, J. A. (2011). Students' readiness and perceptions towards using mobile technologies for learning the English language literature components. *Retrieved August*, *31*, 2012.
- 25. Saran, M., Seferoglu, G., & Cagiltay, K. (2009). Mobile assisted language learning: English pronunciation at

- learners' fingertips. Eurasian Journal of Educational Research, 34(1), 97-114.
- 26. Sharples, M., Lonsdale, P., Meek, J., Rudman, P. D., & Vavoula, G. N. (2007, October). An evaluation of MyArtSpace: A mobile learning service for school museum trips. In *Proceedings of 6th Annual Conference on Mobile Learning*, *mLearn* (Vol. 2007).
- 27. Society, American Dialect (2011) "App"word 2010 word of the year by the American Dialect Society. Retrieved from http://www.americandialect.org/app-voted-2010-word-of-the-year-by-the-american-dialect-society-updated
- 28. Song, Y., & Fox, R. (2008). Using PDA for undergraduate student incidental vocabulary testing. *ReCALL*, 20(3), 290-314.
- 29. Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. Language Learning & Technology, 14(2), 95-110.
- 30. Wright, C. (2003). Criteria for evaluating the quality of online courses. Alberta Distance Education and Training Association. Retrieved from http://elearning.typepad.com/thelearnedman/ID/evaluatin